121. 108 seeds of Swietenia macrophylla, received from Mr. Gleadow, were sown: 50 have germinated.

Kolábá: Ratnagiri. 122. 7,302 plants, chiefly casuarina, were put down from nurseries in the Dápóli plantation, and 9 khandis of seed were sown broadcast in the forest.

Bijápúr.

123. 37 maunds of nim-seed, 12 of Chloroxylon swietenia and 6 seers of sandal were collected and sown.

### (3).—Early Thinnings.

- 124. 123 acres of the Karwar casuarina-plantation were thinned.
- 125. 172 square miles of forest in the Halyál-range were thinned, and 25 square miles in Súpá.
  - 126. 648 acres in the Hunshettikóp-jungle of the Yellápúr-range were thinned.
- 127. 4,000 acres of forest were thinned in the Khánápúr-range of the Belgaum Division.
  - (4).—Other Operations for the Improvement of the Forest.
  - 128. In Kolabá, inferior species on 4,200 acres were girdled to death.
- 129. Similar operations were carried out in Belgaum (4,000 acres): in the Yellapurrange (200 acres): in Supá-range (1,200 acres): in Karwar-range (1,000 acres).
- 130. Forest guards were also employed in cutting down creepers and other vegetation that interfered with the growth of superior species.

## (5).—Experiments.

- 131. A small quantity of seed of Swietenia macrophylla was sown in the Yellapurrange, and 94 seedlings were raised and transplanted, but died in the course of the year.
  - 132. In the Belgaum-range, 50 seedlings of this species were grown.

# CHAPTER III.

## GROSS YIELD AND OUTTURN OF FOREST PRODUCE.

#### NORTHERN, CENTRAL AND SOUTHERN DIVISIONS OF KANARA.

- 133. The large teak exploited, yielded 404,129 cubic feet against 371,216 cubic feet in 1893-94; and small teak, such as poles, rafters, &c., aggregated 58,610 cubic feet against 28,018 cubic feet.
- 134. The large jungle-wood removed, fell, from 336,605 cubic feet in 1893-94, to 322,265 cubic feet in 1894-95, and small jungle-wood, from 20,298, to 11,393 cubic feet. The quantity of large black-wood exploited also fell, from 30,205, to 18,055 cubic feet.
- 135. The increase in the yield of large teak, occurs chiefly in the Northern Division of Kanara, where contractors brought in wood (about 70,000 cubic feet) which was due in the previous year. On the other hand, the Central Division of Kanara shows a decrease of about 39,000 cubic feet, because wood for the Kódibág-depôt arrived too late to be accounted for in 1894-95.
- 136. There was a good demand for teak-poles, and, therefore, the clearing-off of teak in occupied lands was accelerated.
- 137. In 1893-94 the demand for *matti* (Terminalia tomentosa) and black-wood was abnormally great, and to this circumstance is due the decrease in the quantity of jungle-and black-wood exploited during 1894-95.
- 138. The demand for bamboos continued to be good, the number of stems extracted rising, from 3,707,493, to 4,386,358.
- 139. The crop of myrobollams was very poor, the quantity collected being 2,312 khandis against 4,479 in 1893-94.
- 140. The firewood exploited, increased, from 1,211,623 cubic feet, to 3,142,352. The increase is common to all three divisions of Kánara, but occurs chiefly in Northern and Southern Kanara; about 356,000 cubic feet more than the quantity removed in 1893-94 were
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removed by exporters. The fuel supplied to the Southern Mahratta Railway-Company from Northern Kanara, was 1,064,140 cubic feet, against 744,780 cubic feet in 1893-94.

### Belgaum.

- 141. The yield of large teak rose, from 8,911 cubic feet in 1893-94, to 17,351 cubic feet in 1894-95; and of black-wood from 233 to 5,496 cubic feet; but of jungle-wood fell, from 6,417 cubic feet, to 3,462 cubic feet.
- 142. The outturn of small teak, black-and jungle-wood (poles, &c.), measured 41,724, 20, and 16,060 against 68,875, 700 and 31,255, respectively.
- 143. The increase in the number of teak and black-wood logs is due to the extraction of a large quantity of dead wood from the Nágargáli and Táwarkatti-forests, and to the sale of trees from  $m\acute{a}lki$  lands. The decrease in the small wood is ascribed to the fact that a smaller number of trees suitable for poles, was found in firewood cuttings in Belgaum, Chikódi and Gókák. 9,751 sandalwood-trees were removed from occupied lands against 133; and small pieces of jungle-wood useful for agricultural purposes, amounted to 9,963 against 12,088 cubic feet.
- 144. The yield of firewood was 3,119,827 cubic feet against 5,064,051 cubic feet. A large quantity was exploited from the Athni bábul-kurans in 1893-94, but none in 1894-95. The railway fuel also decreased, from 4,254,382 cubic feet, to 2,359,090; and lighting-wood from 16,802 to 9,020 cubic feet. The supply of railway-fuel was curtailed, because an increased supply was taken from Kanara.
- 145. The yield of myrobollams also decreased, from 5,814, to 3,067 khandis, owing to a bad seed-year.
- 146. The number of bamboos fell, from 512,087, to 441,642. The demand for *medár*, or medium-sized bamboos, diminished, though there was increased demand for the largest and smallest kinds.
  - 147. The outturn of shigekái (pods of Accacia concinna) was 225 khandis against 260.

#### DHARWAR.

- 148. The yield of teak decreased, from 147,217 cubic feet in 1893-94, to 70,869; but that of jungle-and black-wood rafters and *jiráyat*-pieces (agricultural wood) rose, from 6,704 to 13,220 cubic feet. The quantity of fuel extracted, also increased, from 250,591 cubic feet, to 296,060 cubic feet, and the number of bamboos from 363,146, to 409,017.
- 149. The decrease in the yield of teak is ascribable to the fact that the demand in the previous year was phenomenal, and, therefore, a much larger quantity was exploited. The demand, however, for wood of the less valuable species was brisk during 1894-95, and a larger quantity of firewood was removed for local consumption.
  - 150. 10,853 sandal-wood-trees were removed from Malki lands, against 7,766.

## BIJA'PU'R.

151. The jungle-wood-poles and pieces removed, increased, from 6,069, to 9,071 cubic feet; and firewood, from 186,226 cubic feet, to 218,962 cubic feet.

## KOLA'BA'.

- 152. The yield of teak is reported to have decreased, from 478,674, to 378,786 cubic feet, and the quantity of firewood to have increased, from 1,102,940, to 1,850,027.
- 153. The falling-off in the yield of timber is probably not as large as it appears to be. The trees this year were sold standing for a lump sum and the means of measuring the wood exploited were less exact than when the wood was stacked and measured after exploitation.
- 154. As regards the increase in fuel, some of the contractors of the previous year were allowed extensions, and this fact led to the extraction of a quantity of firewood which should have been exploited during the previous year. The coupes in the Karjat-range were better stocked than those of the previous year.